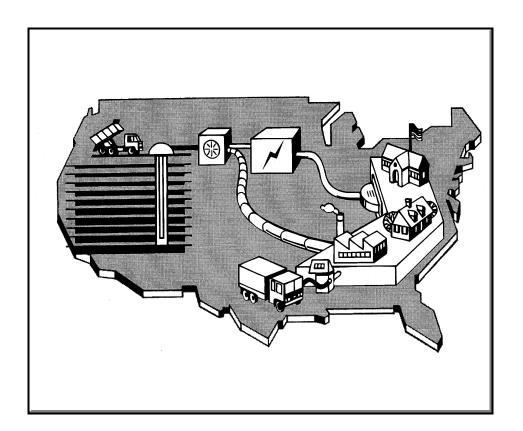


# **Landfill Gas-to-Energy Project Opportunities**

## Landfill Profiles for the State of Alabama





## **EPA Landfill Methane Outreach Program**



The EPA Landfill Methane Outreach Program, a key component of the United State's *Climate Change Action Plan*, encourages the use of landfill gas (LFG) as an energy resource. EPA assists utilities,

municipal and private landfill owners and operators, tribes, and state agencies in reducing methane emissions from landfills through the development of profitable landfill energy recovery projects. Methane captured from landfills can be transformed into a cost-effective fuel source for electricity, heat, boiler and vehicular fuel, or sale to a pipeline. EPA estimates there are approximately 200 landfill methane recovery projects in the U.S. and that up to 750 landfills could install economically viable landfill energy projects.

The Landfill Methane Outreach Program includes five important components: the State Ally, Energy Ally, Industry Ally, Community Partner, and Endorser programs. EPA establishes separate alliances with state agencies, energy providers (including investor-owned, municipal and other public power utilities and cooperatives), key trade and public sector associations, members of the landfill gas development industry (including developers, engineers, equipment vendors, and others) and local communities, municipalities and landfill owner/operators through a Memorandum of Understanding (MOU). By signing the MOU, each Ally/Partner acknowledges a shared commitment to the promotion of landfill gas-to-energy recovery at solid waste landfills, recognizes that the widespread use of landfill gas will reduce emissions of methane and other gases, and commits to undertake activities to enhance development of this resource. In return, EPA agrees to provide landfill gas-to-energy project assistance and public recognition of the Allies' and Partners' participation in the program.

#### Introduction

Since 1994 the U.S. EPA's Landfill Methane Outreach Program (LMOP) has participated in an ongoing effort to gather information on Municipal Solid Waste landfills (MSW). A key component of the LMOP is to provide MSW landfill owners and operators, project developers, utilities, and other potential project participants with information on MSW landfills that may offer attractive energy development opportunities. This document presents state specific landfill information, hereinafter referred to as the landfill profiles. These profiles are useful to evaluate the potential for developing landfill gas-toenergy projects (LFGTE). EPA assembled this information from state and local sources as well as various national solid waste publications, landfill owners and operators, and project developers.

The EPA has prepared a separate document to describe the methodology used to develop the state-specific landfill profiles and estimate the benefits of using LFGTE as an energy source. The document, Landfill Gas-to-Energy Project Opportunities, Background Information on Landfill Profiles, contains background information on gas collection and use, describes the data fields according to the five sections listed on the landfill profiles, and where applicable, illustrates calculations and default values used to derive estimates. EPA strongly recommends that users read the document prior to using the landfill profiles. Users can obtain the document by calling the LMOP hotline at 1-888-STAR-YES.

#### **Data Sources**

- EPA-ORD Landfill Gas Utilization-Survey (Thorneloe, 1997)
- Directory and Atlas of Solid Waste Disposal Facilities (SWA, 1994)
- Implementation Guide for Landfill Gas Recovery Projects in the Northeast (SCS, 1994)
- Landfill Gas-to-Energy 1994-1995 Activity Report (SWT, 1994)
- Methane Recovery from Landfill Yearbook (GAA, 1994)
- · Project developers, landfill owners, and operators
- · State and local records
- · Survey of Landfill Gas Generation Potential (EPRI, 1992)
- U.S. Landfill Directory (SWANA, 1992)

#### **Landfill Classification**

To facilitate the use of available landfill information, EPA has categorized the landfills into five categories: Current Project, <sup>1</sup> Candidate Project, Shutdown, Other, and Unknown waste-in-place (WIP). These categories are based on the status of the landfill's LFGTE project(s) and WIP. The generation of methane is a function of many factors, the most critical being the amount of waste-in-place and the number of years the waste has been in the landfill. Peak methane generation occurs soon after closure; therefore, the longer the landfill has been closed, the less attractive it becomes for methane recovery. Based on the general timing of peak methane generation, EPA assumes that landfills that ceased accepting waste prior to 1993 have a low probability of generating enough methane to make a gas recovery project economical. Consequently, landfills need to be operating in 1993 to be considered as having a Candidate Project.

#### Landfill Categorizes

#### **Current Project:**

 Landfill with operational LFGTE project or landfill with LFGTE project under construction.

#### Candidate Project:

- Landfill with a potential or planned LFGTE utilization project; or
- Landfill is currently operating or closed after 1993; and has more than 1,000,000 tons of municipal solid waste-inplace.<sup>2</sup>

#### Shutdown:

· Landfill with shutdown LFGTE project.

#### Other

 Landfill has less than 1,000,000 tons of municipal solid waste-in-place with no current or planned LFGTE project.

#### Unknown WIP:

 Landfill with insufficient data to determine the waste-inplace

## **State Summary**

State-specific landfill profile information is summarized in three exhibits. Exhibit 1 presents a summary of the state-specific potential for LFG utilization energy by landfill category. Exhibit 2 summarizes the emissions avoided by fossil fuel displacement for electricity generation and direct use projects. Exhibit 3 presents an index of the state-specific MSW landfills, referenced by category, landfill name and general characteristics.

<sup>&</sup>lt;sup>2</sup> By modeling the relationship between WIP and methane generation, a cut-off of 1,000,000 tons of WIP was established; landfills having at least 1,000,000 tons of WIP are considered candidate landfills.



<sup>&</sup>lt;sup>1</sup> Current projects illustrate the wide range of successful project development options.

**Exhibit 1: Alabama MSW Landfill Summary** 

Category	No. of	Est. Capacity Potential		Est. CH4	Methane R		CO2 Equivalent of CH4		
	Landfills	Electricity (MW)	Gas Capacity (mmBtu/hr)	Generation (mmscf/d)	(tons	(tons/yr)		Reduction (tons/yr)	
					Potential	Current	Potential	Current	
Current	3	18	182	6	33,629	24,283	706,207	509,937	
Candidate	21	74	737	24	136,368	0	2,863,726	0	
Shutdown	1	2	21	1	3,848	0	80,810	0	
Other	8	12	118	4	21,738	0	456,492	0	
Unknown WIP	1								
Total	34	106	1,057	34	195,583	24,283	4,107,235	509,937	

## **Exhibit 2: Potential Alabama Emissions Avoided by Fossil Fuel Displacement**

Category	Electricity Generation Project					Direct Use Project						
	CO2 (tons/yr)		SO2 (tons/yr)		CO2 (tons/yr)			SO2 (tons/yr)				
	Coal	Oil	Natural Gas	Coal	Oil	Natural Gas	Coal	Oil	Natural Gas	Coal	Oil	Natural Gas
Current	143,648	117,900	79,278	908	759	0	101,269	83,117	55,889	921	484	0
Candidate	581,696	477,430	321,031	3,677	3,073	0	410,653	337,046	226,634	3,736	1,964	2
Shutdown	16,575	13,604	9,147	105	88	0	11,588	9,511	6,395	105	55	0
Other	91,556	75,145	50,529	579	484	0	65,460	53,727	36,126	596	313	0
Unknown WIP												
Total	833,475	684,079	459,984	5,268	4,404	0	588,970	483,400	325,045	5,359	2,817	3

## **Exhibit 3: Index of Landfills in Alabama**

Category	Landfill Name	WIP			Landfill	LFG Collected	LFG	Status of LFGTE	
		<2.5 million tons	2.5 to 4 million tons	>4 million tons	Operating in 1998		Utilization Project	Project	
Current	Huntsville MSWLF			<b>~</b>		<b>✓</b>	✓	Operational	
Current	New Georgia MSWLF			<b>V</b>	<b>✓</b>	<b>✓</b>	✓	Operational	
Current	North Montgomery SLF MSW LF			<b>✓</b>	<b>✓</b>		✓	Operational	
Candidate	Acmar Regional Landfill MSWLF	<b>✓</b>						Potential	
Candidate	Athens/Limestone County SLF MSWLF	<b>✓</b>						Potential	
Candidate	Bishop SLF MSWLF	✓			<b>✓</b>			Potential	
Candidate	Calhoun County SLF			<b>✓</b>				Potential	
Candidate	Chastang SLF		✓		<b>✓</b>			Planned	
Candidate	City of Dothan SLF MSWLF			<b>✓</b>	<b>✓</b>			Unknown	
Candidate	Colbert County SLF	✓						Potential	
Candidate	Decatur SLF MSWLF	✓			<b>✓</b>			Potential	
Candidate	Eastern SLF MSWLF	✓			<b>✓</b>			Unknown	
Candidate	Florence SLF MSWLF	<b>✓</b>			<b>✓</b>			Potential	
Candidate	Florence SLF MSWLF (Old)	<b>✓</b>						Potential	
Candidate	Fort Payne SLF MSWLF	<b>✓</b>						Potential	
Candidate	Highway 70 SLF	✓						Potential	
Candidate	Magnolia SLF MSWLF	<b>✓</b>			<b>✓</b>			Potential	
Candidate	Monroe County SLF	<b>✓</b>						Potential	
Candidate	Mt. Olive SLF MSWLF	<b>✓</b>						Potential	
Candidate	Salem Waste Disposal, Inc. MSWLF			<b>✓</b>	✓			Potential	
Candidate	Shannon SLF			<b>✓</b>				Potential	
Candidate	Southside Storage, Inc.			<b>✓</b>	✓			Potential	
Candidate	Superior Cedar Hill LF	<b>✓</b>			<b>✓</b>			Unknown	
Candidate	Turkey Creek SLF MSWLF			<b>✓</b>				Potential	
Shutdown	Irvington SLF	<b>✓</b>				<b>✓</b>		Shutdown	
Other	Coffee County Regional SLF MWSLF	<b>✓</b>			✓			Unknown	
Other	Cullman County SLF	<b>✓</b>						Unknown	
Other	Cullman Environmental Waste Manage	<b>✓</b>			<b>✓</b>			Unknown	
Other	Pine View SLF MSWLF	<b>✓</b>			✓			Unknown	
Other	Saraland SLF	<b>✓</b>						Unknown	
Other	Timberlands SLF MSWLF	<b>✓</b>			✓			Unknown	
Other	Tuskegee SLF	<b>✓</b>						Unknown	
Other	Valley View SLF (Stevenson SLF)	<b>✓</b>				✓		Unknown	
Unknown WIP	Troy SLF							Unknown	

Acmar Regional Landfill MSWLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: Superior Services, Inc Annual Acceptance Rate (tons): 114,860 Landfill Owner Type: Private Year Annual Acceptance Rate Reported: 1994 Alternative Landfill Name: Acmar Coal County SLF Design Capacity (tons): City: Moody Acres Currently Landfilled (acres): County: St. Clair Average Depth (feet): State: AL Waste-in-Place (tons): 1,289,239 Year Open: 1983 1998 Waste-in-Place (tons): 1,381,326 Year Closed: 1997 **B. LANDFILL GAS COLLECTION** Estimated Methane Generation (mmscf/d): 0.77 LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: Yes C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Potential Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s): Southern Alabama Power Natural Gas Provider(s): Energy Purchaser(s): Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr)

2 Estimated Potential Capacity: 24

Current Capacity: Planned Capacity:

Alabama Power Company; Coosa Valley Electric Coop Inc Utilities in County:

#### D. ENVIRONMENTAL BENEFITS OF UTILIZATION Potential Current Methane Reduction (tons/yr): 4,459 0 CO2 Equivalent of CH4 Reduction (tons/yr): 93,645 0 Emissions Avoided by Fossil Fuel Displacement: Electricity Generation Project Direct Use Project CO2 (tons/yr) SO2 (tons/yr) CO2 (tons/yr) SO2 (tons/yr) Coal: 18,943 120 13,429 122 Fuel Oil: 15,547 100 11,022 64 Natural Gas: 0 0 10,454 7.411

E. CONTACT INFORMATION
Landfill Owner

		1
Contact Name:	Jay Warzinski	Terry Kelley, Site Manager
Mailing Address:	One Honey Creek Corporate Center	3301 Acmar Road
	125 South 84th Street	P.O. Box 430
Phone Number:	414-529-1360/328-2800	205-640-1799
Fax Number:	205-640-1718	

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Landfill Operator

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<sup>\*</sup> Itallicized indicates values estimated by EPA.

Athens/Limestone County SLF MSWLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: City of Athens Annual Acceptance Rate (tons): Landfill Owner Type: Public 1995 Year Annual Acceptance Rate Reported: Alternative Landfill Name: Design Capacity (tons): City: Athens Acres Currently Landfilled (acres): 65 County: Limestone Average Depth (feet): 78 State: AL Waste-in-Place (tons): 1,195,575 Year Open: 1972 1998 Waste-in-Place (tons): 1,243,398 Year Closed: 1997 **B. LANDFILL GAS COLLECTION** 0.74 Estimated Methane Generation (mmscf/d): LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Potential Unknown Utilization System Type: Utilization System Start Year: Electric Utility Provider(s): Decatur Utilities Natural Gas Provider(s): Wheeler Basin Gas Energy Purchaser(s): Asphalt plant Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) 2 Estimated Potential Capacity: 23 Current Capacity: Planned Capacity: Athens Utilities; Tennessee Valley Authority Utilities in County: D. ENVIRONMENTAL BENEFITS OF UTILIZATION Potential Current Methane Reduction (tons/yr): 4,255 0 CO2 Equivalent of CH4 Reduction (tons/yr): 89,363 0 Emissions Avoided by Fossil Fuel Displacement: Electricity Generation Project Direct Use Project CO2 (tons/yr) SO2 (tons/yr) CO2 (tons/yr) SO2 (tons/yr) Coal: 18,153 115 12,814 117 Fuel Oil: 14,899 96 10,518 61 Natural Gas: 10.019 0 7,072 0 E. CONTACT INFORMATION

	Landfill Owner	Landfill Operator		
Contact Name:	Joe Pugh	Larry Elkins, Sanitation Director		
Mailing Address:	P.O. Box 2419	P.O. Box 1089		
Phone Number: Fax Number:	205-233-8730	205-233-8747		

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Bishop SLF MSWLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: Bishop Landfill Company Annual Acceptance Rate (tons): 63,926 Landfill Owner Type: Private Year Annual Acceptance Rate Reported: 1995 Alternative Landfill Name: Design Capacity (tons): City: Albertville Acres Currently Landfilled (acres): 45 County: Marshall Average Depth (feet): State: AL Waste-in-Place (tons): 1,078,906 Year Open: 1978 1,192,475 1998 Waste-in-Place (tons): Year Closed: 2004 **B. LANDFILL GAS COLLECTION** Estimated Methane Generation (mmscf/d): 0.72 LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Potential Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s): Natural Gas Provider(s): Energy Purchaser(s): Gas Pipeline Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) 2 Estimated Potential Capacity: 23 Current Capacity: Planned Capacity: Albertville Utils Board; Arab Electric Cooperative Inc; Cherokee Electric Cooperative; Guntersville E Utilities in County: D. ENVIRONMENTAL BENEFITS OF UTILIZATION Current Potential Methane Reduction (tons/yr): 4,180 0 CO2 Equivalent of CH4 Reduction (tons/yr): 87,782 0 Emissions Avoided by Fossil Fuel Displacement: Electricity Generation Project Direct Use Project CO2 (tons/yr) SO2 (tons/yr) CO2 (tons/yr) SO2 (tons/yr) Coal: 18,153 115 12,588 115 Fuel Oil: 14,899 96 10,331 60 Natural Gas: 10.019 0 6,947 0 E. CONTACT INFORMATION Landfill Owner Landfill Operator Contact Name: Phillip Bishop Jack Honeycutt Mailing Address: 5390 Alabama Hwy, 205N P.O. Box 2472 P.O. Box 2472 Phone Number: 205-878-0939 334-277-9732 Fax Number:

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Calhoun County SLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: Calhoun County Commission Annual Acceptance Rate (tons): 7,252 Landfill Owner Type: 1994 Public Year Annual Acceptance Rate Reported: Alternative Landfill Name: Anniston SLF Design Capacity (tons): City: Anniston Acres Currently Landfilled (acres): County: Calhoun Average Depth (feet): State: AL Waste-in-Place (tons): 7,138,427 Year Open: 1969 1998 Waste-in-Place (tons): 6,863,878 Year Closed: 1993 **B. LANDFILL GAS COLLECTION** Estimated Methane Generation (mmscf/d): 2.17 LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Potential Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s): Natural Gas Provider(s): Energy Purchaser(s): U.S. Army Depot Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) 7 Estimated Potential Capacity: 68 **Current Capacity:** Planned Capacity: Alabama Power Company; Cherokee Electric Cooperative; Coosa Valley Electric Coop Inc; Piedmont Utilities in County: D. ENVIRONMENTAL BENEFITS OF UTILIZATION

Potential		Current		
	12,567		0	
	263,905		0	
Electricity Gene	ration Project	Direct Use Project		
CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)	
53,671	339	37,843	344	
44,051	284	31,060	181	
29,620	0	20,885	0	
	Electricity Gene CO2 (tons/yr) 53,671 44,051 29,620	12,567 263,905  Electricity Generation Project CO2 (tons/yr) SO2 (tons/yr) 53,671 339 44,051 284	12,567 263,905  Electricity Generation Project	

	Landfill Owner	Landfill Operator		
Contact Name:	Butler Green	Butler Green		
Mailing Address:	1702 Noble Street, Suite 103	1702 Noble Street, Suite 103		
Phone Number:	205-236-3521			
Fax Number:		205-237-7131		

<sup>\*</sup> Itallicized indicates values estimated by EPA.

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Chastang SLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: City of Mobile Annual Acceptance Rate (tons): 137,048 Landfill Owner Type: Year Annual Acceptance Rate Reported: 1995 Alternative Landfill Name: City of Mobile SLF MSWLF Design Capacity (tons): City: Mobile Acres Currently Landfilled (acres): County: Mobile Average Depth (feet): State: AL Waste-in-Place (tons): 3,184,981 Year Open: 1978 1998 Waste-in-Place (tons): 3,520,245 Year Closed: **B. LANDFILL GAS COLLECTION** Estimated Methane Generation (mmscf/d): 1 32 LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Planned Direct Thermal Utilization System Type: Utilization System Start Year: Electric Utility Provider(s): Natural Gas Provider(s): Energy Purchaser(s): E.L.F Autochem Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) Estimated Potential Capacity: 4 41 Current Capacity: Planned Capacity: Alabama Power Company; Southeastern Power Admin Utilities in County: D. ENVIRONMENTAL BENEFITS OF UTILIZATION Potential Current Methane Reduction (tons/yr): 7.622 0 CO2 Equivalent of CH4 Reduction (tons/yr): 160,068 0 Emissions Avoided by Fossil Fuel Displacement: Electricity Generation Project Direct Use Project CO2 (tons/yr) SO2 (tons/yr) CO2 (tons/yr) SO2 (tons/yr) Coal: 32,360 205 22,954 209 Fuel Oil: 26,560 171 18,839 110 Natural Gas: 17.859 0 12,668 0 E. CONTACT INFORMATION Landfill Owner Landfill Operator Contact Name: Mike Dow, Mayor James Sweat, Landfill Manager Mailing Address: P.O. Box 1827 770 Gayle Street

Mailing Address:
P.O. Box 1827

Phone Number:

Pax Number:

Mike Dow, Mayor

James Sweat, Landfill Manager

770 Gayle Street

205-434-7677

205-434-7677

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<sup>\*</sup> Itallicized indicates values estimated by EPA.

City of Dothan SLF MSWLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: City of Dothan Annual Acceptance Rate (tons): 99,824 Landfill Owner Type: Public Year Annual Acceptance Rate Reported: 1995 Alternative Landfill Name: Design Capacity (tons): City: Dothan Acres Currently Landfilled (acres): 80 County: Houston Average Depth (feet): State: AL Waste-in-Place (tons): 4.299.512 Year Open: 4,606,620 1969 1998 Waste-in-Place (tons): Year Closed: 2005 **B. LANDFILL GAS COLLECTION** 1.60 Estimated Methane Generation (mmscf/d): LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Unknown Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s): City Municipal Utility Natural Gas Provider(s): Southeast Alabama Gas District Energy Purchaser(s): S.E. Electrical Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) Estimated Potential Capacity: 5 50 Current Capacity: Planned Capacity: Alabama Power Company; Dothan Electric Dept; Southeastern Power Admin; Wiregrass Electric Coo Utilities in County: D. ENVIRONMENTAL BENEFITS OF UTILIZATION Potential Current Methane Reduction (tons/yr): 9,229 0 CO2 Equivalent of CH4 Reduction (tons/yr): 193,807 0

#### Emissions Avoided by Fossil Fuel Displacement: Electricity Generation Project Direct Use Project CO2 (tons/yr) SO2 (tons/yr) CO2 (tons/yr) SO2 (tons/yr) Coal: 39,464 249 27,792 253 Fuel Oil: 209 32,390 22,810 133 Natural Gas: 0 0 21,780 15,338 E. CONTACT INFORMATION

	Landfill Owner	Landfill Operator		
Contact Name:	Jerry Corbin, PW Director	Bill Ward		
Mailing Address:	P.O. Box 2128	P.O. Box 2128		
Phone Number:	334-793-0185	334-793-0185		
Fax Number:	334-712-2587			

<sup>\*</sup> Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page: 6



			Colbert County S	LF		Landfill Categor	v: Candidate
		A. GI	NERAL LANDFILL IN	FORMAT	ION		
Landfill Owner:	Colbert	County Commis	sion Ann	nual Accept	ance Rate (tons	s):	202,887
Landfill Owner Type:	Public		Yea	r Annual A	cceptance Rate	Reported:	1989
Alternative Landfill N	ame:		Des	ign Capaci	ty (tons):		
City:			Acr	es Currentl	y Landfilled (ad	cres):	100
County:	Colbert	i.	Ave	erage Depth	(feet):		45
State:	AL		199	96 Waste-ir	n-Place (tons):		1,000,000
Year Open:	1970		199	8 Waste-in	-Place (tons):		1,000,000
Year Closed:	1989						
		В	. LANDFILL GAS COLI	LECTION			
Estimated Methane Ge	eneration (mmsc	f/d):		0.67			
LFG Collection System	n Status:						
Current LFG Collected							
Collection and Treatm	ent System Requ			No			
		(	C. LANDFILL GAS UTIL	LIZATION			
Current Utilization:							
Utilization Syster	n Status:	Potential					
Utilization Syster	n Type:	Unknown					
Utilization Syster	n Start Year:						
Electric Utility Pr	rovider(s):	Sheffield Pov	ver				
Natural Gas Prov	ider(s):						
Energy Purchaser	c(s):	Great Southe	rn				
Capacity:		Electricit	y Generation Project (MW	) (	DR Di	irect Use Project (mmBtu/	hr)
Estimated Potent	ial Capacity:			2			21
Current Capacity	:						
Planned Capacity	:						
Utilities in County:		Cherokee Ele	ctric Cooperative; Franklin	n Electric C	looperative; Mu	uscle Shoals Elec Board; S	heffield P
•			ONMENTAL BENEFITS				
			Poten	tial		Current	
Methane Reduction (to	ons/yr):				3,895		0
CO2 Equivalent of CH	• '	ns/yr):			81,803		0
Emissions Avoided by	Fossil Fuel Disp	olacement:		Electricity Generation Project Direc			
			CO2 (tons/yr)	SO2 (tor	is/yr)	CO2 (tons/yr)	SO2 (tons/yr)
		Coal:	16,575		105	11,731	107
		Fuel Oil:	13,604		88	9,628	56
	N	latural Gas:	9,147		0	6,474	0
		10011	E. CONTACT INFORM	IATION		16.11 0	
		Landfill (				Landfill Operator	
Contact Name:	Tom Penningto	on, Chairman, Di	strict No. 2	Howa	rd Keaton		
Mailing Address:	201 North Mai	n Street		P.O. I	30x 408		
Phone Number:	205 294 9599			207.2	81 0020		
	205-386-8500			205-3	81-9030		
Fax Number:							
	I.						

\* Itallicized indicates values estimated by EPA.

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Decatur SLF MSWLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: City of Decatur Annual Acceptance Rate (tons): 120,000 Landfill Owner Type: Public Year Annual Acceptance Rate Reported: 1998 Alternative Landfill Name: Morgan County SLF MSWLF Design Capacity (tons): City: Decatur Acres Currently Landfilled (acres): County: Morgan Average Depth (feet): State: ΑL 1998 Waste-in-Place (tons): 2,150,696 Year Open: 1974 1998 Waste-in-Place (tons): 2,150,696 Year Closed: 2032 **B. LANDFILL GAS COLLECTION** 0.97 Estimated Methane Generation (mmscf/d): LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Potential Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s): Natural Gas Provider(s): Energy Purchaser(s): Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) Estimated Potential Capacity: 3 30 **Current Capacity:** Planned Capacity: Arab Electric Cooperative Inc; Cullman Electric Cooperative; Decatur Utilities; Hartselle Utilities Bo Utilities in County: D ENVIDONMENTAL DENEETTS OF LITTLE TATION

D. ENVIRONMENTAL BENEFITS OF UTILIZATION							
	Pote	ential	Current				
Methane Reduction (tons/yr):		5,597		0			
CO2 Equivalent of CH4 Reduction (tons/yr):		117,539		0			
Emissions Avoided by Fossil Fuel Displacement:	Electricity Gener	ration Project	Direct Use Project				
	CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)			
Coal:	23,678	150	16,855	153			
Fuel Oil:	19,434	125	13,834	81			
Natural Gas:	13,068	0	9,302	0			
E. CONTACT INFORMATION							

	Landfill Owner	Landfill Operator
Contact Name:	Joe Pugh, Mayor	Richard Grace
Mailing Address:	P.O. Box 2419 LFOwnAddress2	P.O. Box 488
Phone Number:	205-233-8730	205-351-7988
Fax Number:		

<sup>\*</sup> Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page: 8



			Eastern SLF N			Landfill Cat	regory: Candidate
		A. GE	NERAL LANDFILL	INFO	RMATION		
Landfill Owner:	Street &	& Sanitation Depa	artment	Annua	l Acceptance Rate (	tons):	72,276
Landfill Owner Type:	Public			Year A	Annual Acceptance I	Rate Reported:	1995
Alternative Landfill N	ame: Eastern	Area LF/MSWL	F	Design	n Capacity (tons):		
City:	Birmin	gham		Acres	Currently Landfilled	l (acres):	75
County:	Jefferso			Averag	ge Depth (feet):		
State:	AL				-in-Place (tons):		1,676,587
Year Open:	1975				Waste-in-Place (tons	):	1,829,004
Year Closed:	2016				, (	,-	-,,
		В	. LANDFILL GAS C	OLLE	CTION		
Estimated Methane Ge	pneration (mmsc	f/d):		0	).89		
LFG Collection System		<i>γ</i> , α <b>γ</b> .		Ü			
Current LFG Collected							
Collection and Treatm	,	uirad Undar NCDS	C/EC.		No		
Conection and Treating	ent System Req		S. LANDFILL GAS U				
			. LANDFILL GAS C		ATION		
Current Utilization:							
Utilization Syster		Unknown					
Utilization Syster	• •	Unknown					
Utilization Syster							
Electric Utility P	rovider(s):						
Natural Gas Prov	ider(s):						
Energy Purchaser	r(s):						
Capacity:		Electricity	y Generation Project (I	MW)	OR	Direct Use Project (mr	nBtu/hr)
	i al Canacitus		, <u> </u>		3	<b>.</b>	28
Estimated Potent					3		28
Current Capacity							
Planned Capacity	:						
Utilities in County:		Alabama Pow	ver Company; Bessemo	er Elec	Service; Southeaste	rn Power Admin; Tarran	at, City of, Elec
		D. ENVIR	ONMENTAL BENE	FITS C	OF UTILIZATION		
			P	otential	l	Curr	ent
Methane Reduction (to	ons/yr):				5,121		0
CO2 Equivalent of CH	14 Reduction (to	ns/yr):			107,547		0
Emissions Avoided by	Fossil Fuel Disp	placement:	Electricity Generation Project		Direct Use Project		
			CO2 (tons/yr)	Å	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)
		Coal:	22,100		140	15,422	140
		Fuel Oil:	18,139		117	12,658	74
Natural Gas:			12,197		0	8,511	0
	••	ann ar Gas.		DMA.			J.
		Landfill C	E. CONTACT INFO	JKIVIA	HON	Landfill Operator	
Contact Name:	T T G:						
Contact Name:	James L. Stew	art, Sanitation Dir	rector		Mickey Hamilton	, Landfill Supervisor	
Mailing Address:	501 6th Avenu	e South			501 6th Avenue S	outh	
Phone Number:	205-254-6316				205-841-4732		
l	== == . 5510						

<sup>\*</sup> Itallicized indicates values estimated by EPA.

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			Florence SLF MSV	WI F	Landfill Category	v: Candidate	
A. GENERAL LANDFILL INFORMATION							
Landfill Owner:	City of	Florence Public		nual Acceptance Rate	(tons):	51,480	
Landfill Owner Type:	City of	1 Torence I ubite		ar Annual Acceptance		1998	
Alternative Landfill Na	ame:			sign Capacity (tons):	c Rate Reported.	1770	
City:	Florence	e		res Currently Landfill	led (acres):		
County:	Lauder	-		erage Depth (feet):	iod (deles).		
State:	AL			ste-in-Place (tons):		275,643	
Year Open:	1988			98 Waste-in-Place (to	ns):	758,018	
Year Closed:	2015				•••	,,,,,,,	
		I	B. LANDFILL GAS COL	LECTION			
Estimated Methane Ge	neration (mmsc	f/d):		0.27			
LFG Collection System	n Status:						
Current LFG Collected	d (mmscf/d):						
Collection and Treatme	ent System Requ	aired Under NSF	PS/EG:	No			
			C. LANDFILL GAS UTII	LIZATION			
Current Utilization:							
Utilization System	n Status:	Potential					
Utilization System		Unknown					
Utilization System	n Start Year:						
Electric Utility Pr		Florence Ele	ctricity				
Natural Gas Provi	ider(s):						
Energy Purchaser	(s):						
Capacity:		Electrici	ty Generation Project (MW	OR	Direct Use Project (mmBtu/	hr)	
Estimated Potenti	al Capacity:			1		8	
Current Capacity:							
Planned Capacity	:						
Utilities in County:		Florence Ele	ctric Dept; Tennessee Vall	ey Authority			
		D. ENVIR	RONMENTAL BENEFIT	S OF UTILIZATIO	N		
			Poter	ıtial	Current		
Methane Reduction (to	ons/yr):			1,549		0	
CO2 Equivalent of CH	4 Reduction (to	ns/yr):		32,525		0	
Emissions Avoided by	Fossil Fuel Disp	olacement:	Electricity Generation Project		Direct Use Proje		
			CO2 (tons/yr)	SO2 (tons/yr)		O2 (tons/yr)	
		Coal:	6,314	40	4,664	42	
		Fuel Oil:	5,182	33	3,828	22	
Natural Gas:			3,485	0	2,574	0	
			E. CONTACT INFORM	MATION			
		Landfill (	Owner		Landfill Operator		
Contact Name:	Jimmy Hickma	nn, City Sanitatio	on Director	Jimmy Hickman	n, City Sanitation Director		
Mailing Address:	P.O. Box 98			P.O. Box 98			
Phone Number:	205-740-4146			205-740-4146			
Fax Number:							

\* Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page: 10



Florence SLF MSWLF (Old) Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: City of Florence Annual Acceptance Rate (tons): Landfill Owner Type: Public 1992 Year Annual Acceptance Rate Reported: Alternative Landfill Name: Design Capacity (tons): City: Florence Acres Currently Landfilled (acres): County: Lauderdale Average Depth (feet): State: AL Waste-in-Place (tons): 1,461,912 Year Open: 1969 1998 Waste-in-Place (tons): 1,218,260 Year Closed: 1988 **B. LANDFILL GAS COLLECTION** Estimated Methane Generation (mmscf/d): 0.73

LFG Collection System Status: Current LFG Collected (mmscf/d):

Collection and Treatment System Required Under NSPS/EG:

## C. LANDFILL GAS UTILIZATION

No

2

Current Utilization:

**Utilization System Status:** Potential Utilization System Type: Unknown

Utilization System Start Year:

Electric Utility Provider(s): Florence Electricity

Natural Gas Provider(s): Energy Purchaser(s):

Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr)

Estimated Potential Capacity: Current Capacity:

Planned Capacity:

Florence Electric Dept; Tennessee Valley Authority Utilities in County:

D. ENVIRONMENTAL DENETIES OF CHEIZATION	$\Gamma$	. ENVIRONMENTAL	BENEFITS OF UTILIZATION
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Landfill Owner

	Pote	ential	Curre	ent	
Methane Reduction (tons/yr):		4,218	0		
CO2 Equivalent of CH4 Reduction (tons/yr):		88,582		0	
Emissions Avoided by Fossil Fuel Displacement:	Electricity Generation Project		Direct Use	Project	
	CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)	
Coal:	18,153	115	12,703	116	
Fuel Oil:	14,899	96	10,426	61	
Natural Gas:	10,019	0	7,010	0	

### E. CONTACT INFORMATION

		•
Contact Name:	Jimmy Hickman, City Sanitation Director	Jimmy Hickman, City Sanitation Director
Mailing Address:	P.O. Box 98	P.O. Box 98
Phone Number:	205-740-4146	205-740-4146
Fax Number:		

<sup>\*</sup> Itallicized indicates values estimated by EPA.

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Landfill Operator

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			Fort Payne SLF MS	WI E	I an dfill Car	egory: Candidate	
		A. G	ENERAL LANDFILL IN		Lanajiii Cai	egory. Calididate	
I 1611 O	City of				(4)	51.664	
Landfill Owner: Landfill Owner Type:	City of Public	Fort Payne		nual Acceptance Rate or Annual Acceptance		51,664 1994	
Alternative Landfill N				ign Capacity (tons):	e Kale Reported.	1994	
City:	Fort Pa	vne		es Currently Landfill	ed (acres):	43	
County:	De Kal	-		erage Depth (feet):	ed (acres).	50	
State:	AL	U		ste-in-Place (tons):		1,456,490	
Year Open:	1969			8 Waste-in-Place (to	ns):	1,508,505	
Year Closed:	1997		1//	o waste in 1 tace (to		1,000,000	
B. LANDFILL GAS COLLECTION							
Estimated Methane Ge	eneration (mmsc	f/d):		0.80			
LFG Collection System	n Status:						
Current LFG Collected	d (mmscf/d):						
Collection and Treatm	ent System Requ	uired Under NS	PS/EG:	No			
			C. LANDFILL GAS UTII	IZATION			
Current Utilization:							
Utilization Syster	n Status:	Potential					
Utilization Syster	n Type:	Unknown					
Utilization Syster	n Start Year:						
Electric Utility Pr	rovider(s):	Fort Payne	mprovement Authority				
Natural Gas Prov							
Energy Purchaser	r(s):						
Capacity:		Electric	ty Generation Project (MW	) OR	Direct Use Project (mr	nBtu/hr)	
Estimated Potent	ial Canacity:		<u> </u>	3	3 \	25	
Current Capacity				3		23	
Planned Capacity							
	•						
Utilities in County:			ectric Cooperative; Marsha			ric Coop; Tenn	
		D. ENVI	RONMENTAL BENEFIT	S OF UTILIZATIO	N		
			Poten	tial	Current		
Methane Reduction (to	- ·			4,647		0	
CO2 Equivalent of CH	14 Reduction (to	ns/yr):		97,595		0	
Emissions Avoided by	Fossil Fuel Disa	nlacement:	Electricity Genera	tion Project	Direct Use	Project	
Emissions rivolaca by	r ossii r uci Disp	насетені.	CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)	
		Coal:	19,732	125	13,995	127	
			16,195	104	11,487	67	
Fuel Oil:							
Natural Gas: 10,890			·	0	7,724	0	
		T 10"11	E. CONTACT INFORM	IATION	1. 1011.0		
		Landfill	Owner		Landfill Operator		
Contact Name:	Kenny Freer			John Walker, La	andfill Supervisor		
Mailing Address:	200 Gault Ave	nue South		200 Gault Avenue South			
Phone Number:	256-845-6418			256-845-8897			
Fax Number:							

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\* Itallicized indicates values estimated by EPA. December 5, 1998



Highway 70 SLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: Shelby County Annual Acceptance Rate (tons): Landfill Owner Type: Public 1993 Year Annual Acceptance Rate Reported: Alternative Landfill Name: Shelby County SLF Design Capacity (tons): City: Acres Currently Landfilled (acres): County: Shelby Average Depth (feet): State: ΑL Waste-in-Place (tons): 2,104,520 Year Open: 1982 1998 Waste-in-Place (tons): 2,244,819 Year Closed: 1997 **B. LANDFILL GAS COLLECTION** 0.99 Estimated Methane Generation (mmscf/d): LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Potential Unknown Utilization System Type: Utilization System Start Year: Electric Utility Provider(s): Natural Gas Provider(s): Energy Purchaser(s):

Capacity:	Electricity Generation Project (MW)	Ol	R Direct Use Project (mmBtu/hr)
Estimated Potential Capacity:		3	31
Current Capacity:			
Planned Capacity:			

D ENVIDONMENTAL DENEETTS OF LITTLE TATION

Utilities in County: Alabama Power Company; Coosa Valley Electric Coop Inc; Southeastern Power Admin

D. ENVIRONMENTAL BENEFITS OF UTILIZATION								
	Pote	ential	Current					
Methane Reduction (tons/yr):		5,736		0				
CO2 Equivalent of CH4 Reduction (tons/yr):		120,462		0				
Emissions Avoided by Fossil Fuel Displacement:	Electricity Generation Project		Direct Use	Project				
	CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)				
Coal:	24,468	155	17,274	157				
Fuel Oil:	20,082	129	14,178	83				
Natural Gas:	13,503	0	9,533	0				
	E. CONTACT INFOR	MATION						

	Landfill Owner	Landfill Operator
Contact Name:	Alex Duchoff, County Manager	George Holcomb, Environmental Manager
Mailing Address:	510 Highway 70	510 Highway 70
Phone Number: Fax Number:	205-669-3740	205-669-3880

<sup>\*</sup> Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page: 13



			Huntsville MS	WLF		Landfill Category:	Current
		<b>A. G</b>	ENERAL LANDFILL I	NFORMAT	ION		
Landfill Owner:	City of	Huntsville	A	nnual Accep	tance Rate (to	ons):	266,671
Landfill Owner Type:	Public		Y	ear Annual A	Acceptance R	ate Reported:	1989
Alternative Landfill N	ame:		D	Design Capaci	ity (tons):		
City:	Huntsv	ille	A	cres Current	ly Landfilled	(acres):	215
County:	Madiso	n	A	verage Dept	h (feet):		40
State:	AL		V	Vaste-in-Plac	e (tons):		4,842,834
Year Open:	1971		1.	998 Waste-in	-Place (tons)	:	4,842,834
Year Closed:	1989						
		I	B. LANDFILL GAS CO	LLECTION			
Estimated Methane Ge	eneration (mmsc	f/d):		1.66			
LFG Collection System			Ope	erational			
Current LFG Collected				2.3			
Collection and Treatm	ent System Requ			No			
			C. LANDFILL GAS UT	ILIZATION	J .		
Current Utilization:							
Utilization Syster		Operational					
Utilization Syster		Boiler					
Utilization System		1990					
Electric Utility Pr		Huntsville U					
Natural Gas Prov	* /	Huntsville U					
Energy Purchaser	r(s):	Redstone Ar	senal				
Capacity:		Electrici	ty Generation Project (M	W) (	OR	Direct Use Project (mmBtu/h	r)
Estimated Potent	ial Capacity:			5			52
Current Capacity	:						2
Planned Capacity	<b>':</b>						
Utilities in County:		Alabama Po	wer Company; Huntsville	e Utilities; Te	nnessee Valle	ey Authority	
		D. ENVIR	RONMENTAL BENEFI	TS OF UTI	LIZATION		
			Pot	ential		Current	
Methane Reduction (to	ons/yr):				9,578		8,865
CO2 Equivalent of CH	I4 Reduction (to	ns/yr):			201,142		186,167
T	E !!E !D!	•					
Emissions Avoided by	Fossil Fuel Disp	olacement:	Electricity Gene	=		Direct Use Projec	
			CO2 (tons/yr)	SO2 (to	ns/yr)	CO2 (tons/yr) SO	02 (tons/yr)
		Coal:	41,042		259	28,843	262
		Fuel Oil:	33,686		217	23,673	138
	N	atural Gas:	22,651		0	15,918	0
			E. CONTACT INFOR	RMATION			
		Landfill (	Owner			Landfill Operator	
Contact Name:	Eddie Coker			Rusty	Fugerson		
Mailing Address:	P.O. Box 2619			P.O.	Box 2619		
Training riddiess.	1.0. Box 201)			1.0.1	201)		
Phone Number:	205-880-6054			205-8	81-8700		
For Number	200 000 000			203 (	22 0700		
Fax Number:							
* Itallicized indicates v	values estimated	by EPA.	Dec	ember 5, 199	98	State: AL Page	: 14



			Irvington SL			1	Landfill Category:	Shutdown
		A. GEN	ERAL LANDFILL I	NFOR	MATION			
Landfill Owner:	Mobile	County Commission			Acceptance Rate			
Landfill Owner Type:					nual Acceptance	Rate Reported	d:	
Alternative Landfill N				_	Capacity (tons):			
City:	Mobile				urrently Landfille	ed (acres):		60
County:	Mobile				Depth (feet):			30
State:	AL				n-Place (tons):			967,998
Year Open:	1974		19	998 Wa	iste-in-Place (ton	us):		967,998
Year Closed:	1984							
		<b>B.</b> 1	LANDFILL GAS CO	LLEC	TION			
Estimated Methane Ge	eneration (mmsc	f/d):		0.6	7			
LFG Collection System	n Status:		Ope	erationa	al			
Current LFG Collected	d (mmscf/d):							
Collection and Treatm	ent System Requ	uired Under NSPS/	EG:	N	o			
		C.	LANDFILL GAS UT	ILIZA	TION			
Current Utilization:								
Utilization Syster	n Status:	Shutdown						
Utilization Syster		Unknown						
Utilization Syster	n Start Year:							
Electric Utility Pr	ovider(s):							
Natural Gas Prov	ider(s):							
Energy Purchaser	r(s):							
Comonitore		E14	C	<b>11</b> /)	OD	D:	D:4 ( D4 /l-	
Capacity:		Electricity	Generation Project (M	w)	OR	Direct Use	Project (mmBtu/h	r)
Estimated Potenti				2				21
Current Capacity:								
Planned Capacity	:							
Utilities in County:		Alabama Powe	ower Company; Southeastern Power Admin					
		D. ENVIRO	NMENTAL BENEFI	ITS OF	UTILIZATION	N		
			Pot	ential			Current	
Methane Reduction (to	ne/vr):		100	енни	3,848		Current	0
CO2 Equivalent of CH	- ·	ns/vr):			80,810			0
CO2 Equivalent of CII	4 Reduction (to	113/ y1 ).			00,010			
Emissions Avoided by	Fossil Fuel Disp	olacement:	Electricity Generation Project			Direct Use Projec	t	
			CO2 (tons/yr)	SC	02 (tons/yr)	CO2 (t	ons/yr) SC	02 (tons/yr)
		Coal:	16,575		105		11,588	105
Fuel Oil:		Fuel Oil:	13,604		88		9,511	55
	N	atural Gas:	9,147		0		6,395	0
		I	E. CONTACT INFOR	RMATI	ION			
		Landfill Ow				Landfill C	Operator	
Contact Name:	, Commission						-	
					DO D 227			
Mailing Address:	P.O. Box 1443				P.O. Box 236			
DI AT I								
Phone Number:	334-690-8605				334-626-6926			

\* Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page: 15



Fax Number:

Magnolia SLF MSWLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: **Baldwin County Commission** Annual Acceptance Rate (tons): 96,935 Landfill Owner Type: Public Year Annual Acceptance Rate Reported: 1995 Alternative Landfill Name: Design Capacity (tons): City: Acres Currently Landfilled (acres): 500 Magnolia Springs County: Baldwin Average Depth (feet): State: AL Waste-in-Place (tons): 1.815.335 Year Open: 1980 1,642,446 1998 Waste-in-Place (tons): Year Closed: 2030 **B. LANDFILL GAS COLLECTION** Estimated Methane Generation (mmscf/d): 0.84 LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Potential Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s): EMC Co-Operative Natural Gas Provider(s): Energy Purchaser(s): EMC Coop, Surrounding Farms (seasonal) Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) Estimated Potential Capacity: 3 26 Current Capacity: Planned Capacity: Alabama Power Company; Baldwin County El Member Corp; Fairhope Electric Dept; Riviera Utilitie Utilities in County: D. ENVIRONMENTAL BENEFITS OF UTILIZATION Current Potential Methane Reduction (tons/yr): 4,846 0 CO2 Equivalent of CH4 Reduction (tons/yr): 101.756 0 Emissions Avoided by Fossil Fuel Displacement: Electricity Generation Project Direct Use Project CO2 (tons/yr) SO2 (tons/yr) CO2 (tons/yr) SO2 (tons/yr) Coal: 20,521 130 14,592 133 Fuel Oil: 70 16,843 108 11,976 Natural Gas: 0 0 11.325 8,053 E. CONTACT INFORMATION Landfill Owner Landfill Operator Contact Name: Mickey Hamilton Don Terry Mailing Address: 15140 County Road 49 15140 County Road 49 Phone Number: 334-937-0264 334-988-8125

\* Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page: 16

334-580-2582



Fax Number:

Monroe County SLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: Monroe County Commission Annual Acceptance Rate (tons): Landfill Owner Type: Public Year Annual Acceptance Rate Reported: 1993 Alternative Landfill Name: Design Capacity (tons): City: Monroeville Acres Currently Landfilled (acres): County: Monroe Average Depth (feet): State: AL Waste-in-Place (tons): 1,205,385 Year Open: 1982 1998 Waste-in-Place (tons): 1,205,386 Year Closed: 1993 **B. LANDFILL GAS COLLECTION** Estimated Methane Generation (mmscf/d): 0.73 LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Potential Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s): Natural Gas Provider(s): Energy Purchaser(s): Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) 2 Estimated Potential Capacity: 23 Current Capacity: Planned Capacity: Alabama Power Company; Baldwin County El Member Corp; Clarke-Washington EMC; Pioneer Elec Utilities in County: D. ENVIRONMENTAL BENEFITS OF UTILIZATION Potential Current Methane Reduction (tons/yr): 4,199 0 CO2 Equivalent of CH4 Reduction (tons/yr): 88.181 0 Emissions Avoided by Fossil Fuel Displacement: Electricity Generation Project Direct Use Project CO2 (tons/yr) SO2 (tons/yr) CO2 (tons/yr) SO2 (tons/yr) Coal: 18,153 115 12,645 115 Fuel Oil: 14,899 96 10,379 61 Natural Gas: 10.019 0 6,979 0 E. CONTACT INFORMATION Landfill Owner Landfill Operator Contact Name: Robert English, County Engineer Mailing Address: P.O. Box 8 Phone Number: 334-743-3672 Fax Number:

\* Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page: 17



Mt. Olive SLF MSWLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: Jefferson County Commission Annual Acceptance Rate (tons): Landfill Owner Type: 1993 Public Year Annual Acceptance Rate Reported: Alternative Landfill Name: Design Capacity (tons): City: Mt.Olive Acres Currently Landfilled (acres): County: Jefferson Average Depth (feet): State: AL Waste-in-Place (tons): 2,071,034 Year Open: 2,145,000 1969 1998 Waste-in-Place (tons): Year Closed: 1997 **B. LANDFILL GAS COLLECTION** 0.97 Estimated Methane Generation (mmscf/d): LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION **Utilization System Status:** Potential Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s):

Current Utilization:

Natural Gas Provider(s): Energy Purchaser(s):

Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) Estimated Potential Capacity: 3 30 Current Capacity: Planned Capacity:

Alabama Power Company; Bessemer Elec Service; Southeastern Power Admin; Tarrant, City of, Elec Utilities in County:

D. ENVIRONMENTAL BENEFITS OF UTILIZATION									
	Pote	ential	Current						
Methane Reduction (tons/yr):		5,589		0					
CO2 Equivalent of CH4 Reduction (tons/yr):		117,361		0					
Emissions Avoided by Fossil Fuel Displacement:	Electricity Generation Project		Direct Use Project						
· · · · · · ·	CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)					
Coal:	23,678	150	16,829	153					
Fuel Oil:	19,434	125	13,813	81					
Natural Gas:	13,068	0	9,288	0					
	E. CONTACT INFORMATION								

	Landfill Owner	Landfill Operator	
Contact Name:	Chris McNair, Chairman	Mark Bryant, Solid Waste Administrator	
Mailing Address:	Courthouse Annex Room 217	202-B Courthouse	
Phone Number:	205-325-5504	205-325-5139	
Fax Number:		205-325-5981	
Mailing Address:  Phone Number:	Courthouse Annex Room 217	202-B Courthouse 205-325-5139	

<sup>\*</sup> Itallicized indicates values estimated by EPA. December 5, 1998 State: AL 18 Page:



			New Georgia M	SWLF		Landfill Category	: Current	
		A. G	ENERAL LANDFILL I	NFORMAT	ION			
Landfill Owner:	City of	Birmingham	A	annual Accep	tance Rate (t	tons):	230,660	
Landfill Owner Type:	Public	Y	ear Annual A	Acceptance F	Rate Reported:	1995		
Alternative Landfill N	ame: Birmin	Design Capacity (tons):						
City:	Birmin	gham	Α	cres Current	ly Landfilled	l (acres):	150	
County:	Jefferso	on	Α	verage Dept	h (feet):		60	
State:	AL		1	1994 Waste-i	n-Place (tons	3):	6,394,527	
Year Open:	1956		1	998 Waste-in	-Place (tons	):	7,183,580	
Year Closed:								
		I	B. LANDFILL GAS CO	LLECTION				
Estimated Methane Ge	eneration (mmsc	f/d):		1.73				
LFG Collection System	n Status:		Ope	erational				
Current LFG Collected	d (mmscf/d):			4.0				
Collection and Treatm	ent System Req	uired Under NSF	PS/EG:	No				
			C. LANDFILL GAS UT	TLIZATION	N			
Current Utilization:								
Utilization Syster	n Status:	Operational						
Utilization Syster	n Type:	Direct Thern	nal					
Utilization Syster	n Start Year:	1998						
Electric Utility Pr	rovider(s):							
Natural Gas Prov	ider(s):							
Energy Purchaser	r(s):	Sloss Industr	ries					
Compositor		E14-i-i	t Cti Dit (M	W) (	)D	Dina d Haa Doois of (man Day)	L)	
Capacity:		Electrici	ty Generation Project (M		OR T	Direct Use Project (mmBtu/		
Estimated Potent				5			54	
Current Capacity:							83	
Planned Capacity	:							
Utilities in County:		Alabama Po	wer Company; Bessemer	Elec Service	; Southeaster	rn Power Admin; Tarrant, Cit	y of, Elec	
		D. ENVIR	RONMENTAL BENEFI	ITS OF UTI	LIZATION			
			Pot	ential		Current		
Methane Reduction (to	ons/yr):				10,005		15,418	
CO2 Equivalent of CH	14 Reduction (to	ns/yr):			210,095		323,770	
							D: (II D :	
Emissions Avoided by	Fossil Fuel Disp	placement:	Electricity Generation Project		Direct Use Project			
			CO2 (tons/yr)	SO2 (to	ns/yr)	CO2 (tons/yr) S	O2 (tons/yr)	
		Coal:	42,621		269	30,127	274	
		Fuel Oil:	34,981		225	24,727	144	
	λ	latural Gas:	23,522		0	16,627	0	
			E. CONTACT INFOR	DMATION		,	-	
		Landfill (		KWIATION		Landfill Operator		
Contact Name:	Jamas I Starr			Migle	av Hamilton			
bunies E. Stewart, Sumation Di			rector	Mickey Hamilton, Landfill Supervisor				
Mailing Address:	501 6th Avenu	e South		501 6	th Avenue S	outh		
DI M								
Phone Number:	205-254-6316			205-8	341-4732			
Fax Number:								
* Italliaizad in diasta-	alues estimate 1	by FDA	D	ambar 5 100	nQ	Stata: AI D	a: 10	
* Itallicized indicates v	aiues estimated	vy EPA.	Dec	ember 5, 199	0	State: AL Pag	e: 19	

<sup>\*</sup> Itallicized indicates values estimated by EPA.

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			North Montgomery SLF N	MSWLF	Landfill Cate	egory: Current	
		A. G	ENERAL LANDFILL INF				
Landfill Owner:	City of	Montgomery		al Acceptance Rat	e (tons):	302,252	
Landfill Owner Type:	Public	1410Higoliici y		Annual Acceptance		1995	
Alternative Landfill Name:			Desig	1773			
City:	Montgo	omerv	Acres	348			
County:	Montgo	-	Aver	340			
State:	AL	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		e-in-Place (tons):		7,259,313	
Year Open:	1973			Waste-in-Place (to	ons):	7,864,256	
Year Closed:	2011		1,,0	1990 wasie-in-Flace (ions).			
		I	B. LANDFILL GAS COLL	ECTION			
Estimated Methane Ge	eneration (mmsc	f/d)·		2.43			
LFG Collection System		<i>γ.ω)</i> .		2.43			
Current LFG Collected							
Collection and Treatm		uired Under NSF	PS/FG·	Yes			
Concetion and Treatm	ent Bystem Requ		C. LANDFILL GAS UTILI				
C TIVII			0.2.1.(21.22.0.12.0.12.0.12.1				
Current Utilization:	G	0					
Utilization System		Operational Direct Therr	1				
Utilization System			nai				
Utilization System		1998					
Electric Utility P							
Natural Gas Prov	* *	Il.i D.i.	1_				
Energy Purchaser	r(s):	Jenkins Bric	K				
Capacity:		Electrici	ty Generation Project (MW)	OR	Direct Use Project (mm	Btu/hr)	
Estimated Potent	ial Capacity:			8		76	
Current Capacity:							
Planned Capacity							
		5					
Utilities in County:		Alabama Po	wer Company; Dixie Electric	Cooperative; Sout	th Alabama Elec Coop Inc;	Southeastern P	
		D. ENVII	RONMENTAL BENEFITS	OF UTILIZATIO	ON		
			Potenti	al	Curre	nt	
Methane Reduction (to	ons/yr):			14,046		0	
CO2 Equivalent of CH	I4 Reduction (to	ns/yr):		294,970		0	
Emissions Avoided by	Fossil Fuel Disp	olacement:	Electricity Generati	ū	Direct Use I	5	
			CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)	
		Coal:	59,985	379	42,298	385	
		Fuel Oil:	49,233	317	34,717	202	
	N	atural Gas:	33,105	0	23,344	0	
			E. CONTACT INFORMA	ATION			
		Landfill	Owner		Landfill Operator		
Contact Name:	Chuck Shaner,	Mayor		James H. Sigle	r		
Mailing Address:	P.O. Box 1111	-		P.O. Box 1111			
Mailing Address:	F.O. DOX 1111			F.O. BOX 1111			
Phone Number:	224 244 222			224.242.:==			
354 241 2000				334-240-4527			
Fax Number:	334-240-4874						
				1			

\* Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page: 20



Salem Waste Disposal, Inc. MSWLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: Salem Waste Disposal Annual Acceptance Rate (tons): 419,950 Landfill Owner Type: Private Year Annual Acceptance Rate Reported: 1995 Alternative Landfill Name: Design Capacity (tons): City: Opelika Acres Currently Landfilled (acres): 222 County: Lee Average Depth (feet): State: AL Waste-in-Place (tons): 3.583.572 Year Open: 1985 1998 Waste-in-Place (tons): 4,180,834 Year Closed: 2037 **B. LANDFILL GAS COLLECTION** Estimated Methane Generation (mmscf/d): 1 49 LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Potential Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s): Natural Gas Provider(s): Energy Purchaser(s): Tire Plant, Lumber Company Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) Estimated Potential Capacity: 5 47 Current Capacity: Planned Capacity: Alabama Power Company; Dixie Electric Cooperative; Opelika Light & Power Dept; Southeastern Po Utilities in County: D. ENVIRONMENTAL BENEFITS OF UTILIZATION Potential Current Methane Reduction (tons/yr): 8.599 0 CO2 Equivalent of CH4 Reduction (tons/yr): 180,583 0 Emissions Avoided by Fossil Fuel Displacement: Electricity Generation Project Direct Use Project CO2 (tons/yr) SO2 (tons/yr) CO2 (tons/yr) SO2 (tons/yr) Coal: 36,307 230 25,895 236 Fuel Oil: 192 21,254 29,799 124 Natural Gas: 0 0 20.037 14,291 E. CONTACT INFORMATION Landfill Owner Landfill Operator Contact Name: Ken Mullins Mark Behel Mailing Address: 4210 Lee Rd. 183 4210 Lee Rd. 183 Phone Number: 334-745-0181 334-745-0181 Fax Number:

\* Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page:

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Shannon SLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: Jefferson County Solid Waste Admin. Annual Acceptance Rate (tons): Landfill Owner Type: 1993 Public Year Annual Acceptance Rate Reported: Alternative Landfill Name: Design Capacity (tons): City: Morris Acres Currently Landfilled (acres): County: Jefferson Average Depth (feet): State: AL Waste-in-Place (tons): 9,324,502 Year Open: 1972 1998 Waste-in-Place (tons): 9,324,502 Year Closed: 1993 **B. LANDFILL GAS COLLECTION** Estimated Methane Generation (mmscf/d): 2.80 LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: Yes C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Potential Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s): Natural Gas Provider(s): Southern Natural Gas, Alabama Gas Energy Purchaser(s): Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) 88

9 Estimated Potential Capacity: Current Capacity:

Alabama Power Company; Bessemer Elec Service; Southeastern Power Admin; Tarrant, City of, Elec Utilities in County:

D. ENVIRONMENTAL BENEFITS OF UTILIZATION							
	Pote	ntial	Curre	ent			
Methane Reduction (tons/yr):		16,206		0			
CO2 Equivalent of CH4 Reduction (tons/yr):		340,318		0			
Emissions Avoided by Fossil Fuel Displacement:	Electricity Gener	ation Project	Direct Use Project				
	CO2 (tons/yr)	SO2 (tons/yr)	CO2 (tons/yr)	SO2 (tons/yr)			
Coal:	69,456	439	48,801	444			
Fuel Oil:	57,007	367	40,054	233			
Natural Gas:	38,332	0	26,933	0			
E. CONTACT INFORMATION							

Landfill Operator Contact Name: Chris McNair, Chairman Mark Bryant, Solid Waste Administrator Mailing Address: Courthouse Annex 202 B-Courthouse Phone Number: 205-325-5504 205-325-5139 Fax Number: 205-325-5981

Landfill Owner

Planned Capacity:

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<sup>\*</sup> Itallicized indicates values estimated by EPA.

			Southside Stor	rage Inc		I andfill	Category:	Candidate	
	Southside Storage, Inc.  Landfill Category: Candidate  A. GENERAL LANDFILL INFORMATION								
Landfill Owner Type:	Private	_		Annual Acceptance Rate (tons):				1995	
Alternative Landfill N		oad LF; Old Brov	vnlee Pit	Year Annual Acceptance Rate Reported: while Pit Design Capacity (tons):				1773	
City:	Chicka		Acres Currently Landfilled (acres):					73	
County:	Mobile				e Depth (feet):	ed (deres).		50	
State:	AL			-	in-Place (tons):			4,550,396	
Year Open:	1978				aste-in-Place (tor	ıs):		5,029,389	
Year Closed:	2008		1996 Haste the Lace (tolla).					, ,	
	B. LANDFILL GAS COLLECTION								
Estimated Methane Ge	eneration (mmsc	rf/d):		1.	70				
LFG Collection System	n Status:								
Current LFG Collected	d (mmscf/d):								
Collection and Treatm	ent System Requ	uired Under NSF	PS/EG:	]	No				
			C. LANDFILL GAS I	UTILIZ	ATION				
Current Utilization:									
Utilization Syster	n Status:	Potential							
Utilization Syster	n Type:	Unknown							
Utilization Syster	n Start Year:								
Electric Utility Pr	rovider(s):								
Natural Gas Prov	ider(s):								
Energy Purchaser	r(s):								
Capacity:	Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr)								
Estimated Potent								53	
Current Capacity									
Planned Capacity									
Utilities in County:		Alabama Po	wer Company; Souther	astern Po	wer Admin				
Cumues in County:			RONMENTAL BENE			N			
		D. ERVII			FUILIZATIO		~ .		
M.I. D.I. C. (			Potential 0.954			(	Current		
Methane Reduction (to	= "				9,854			0	
CO2 Equivalent of CH	14 Reauction (to	ns/yr):			206,936			0	
Emissions Avoided by	Fossil Fuel Disp	placement:	Electricity Generation Project			Direct U	Direct Use Project		
			CO2 (tons/yr)	S	O2 (tons/yr)	CO2 (tons/yr)	SO	2 (tons/yr)	
		Coal:	41,832		264	29,674	1	270	
Fuel Oil:			34,334		221	24,355	5	142	
Natural Gas:			23,086		0	16,377	7	0	
	E. CONTACT INFORMATION								
Landfill Owner Landfill Operator									
Contact Name:	James Jackson	ļ.			Mark Connor				
Mailing Address: P.O. Box 11339					P.O. Box 11339				
					DON 1100)				
Phone Number:	334-452-8082				334-456-5321				
					55- <del>-</del> - 750-5521				
Fax Number:									

\* Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page: 23



Superior Cedar Hill LF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: **Urban Sanitation Corporation** Annual Acceptance Rate (tons): 110,425 Landfill Owner Type: Private Year Annual Acceptance Rate Reported: 1995 Alternative Landfill Name: Harmons SLF MSWLF, Urban Sanitation Co Design Capacity (tons): City: Acres Currently Landfilled (acres): Ragwell County: St. Clair Average Depth (feet): State: AL Waste-in-Place (tons): 1.249,440 Year Open: 1,353,560 1973 1998 Waste-in-Place (tons): Year Closed: 2016 **B. LANDFILL GAS COLLECTION** Estimated Methane Generation (mmscf/d): 0.76 LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Unknown Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s): Natural Gas Provider(s): Energy Purchaser(s): Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) 2 Estimated Potential Capacity: 24 Current Capacity: Planned Capacity: Alabama Power Company; Coosa Valley Electric Coop Inc Utilities in County: D. ENVIRONMENTAL BENEFITS OF UTILIZATION Potential Current Methane Reduction (tons/yr): 4,418 0 CO2 Equivalent of CH4 Reduction (tons/yr): 92,784 0 Emissions Avoided by Fossil Fuel Displacement: Electricity Generation Project Direct Use Project CO2 (tons/yr) SO2 (tons/yr) CO2 (tons/yr) SO2 (tons/yr) Coal: 18,943 120 13,305 121 Fuel Oil: 15,547 100 10,920 64 Natural Gas: 10,454 0 0 7,343 E. CONTACT INFORMATION Landfill Owner Landfill Operator Contact Name: Mr. Smith Raymond Cash Mailing Address: P.O. Box 145 P.O. Box 145 Phone Number: 205-338-7821 205-338-7821

\* Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page: 24



Fax Number:

205-338-1062

Turkey Creek SLF MSWLF Landfill Category: Candidate A. GENERAL LANDFILL INFORMATION Landfill Owner: Jefferson County Annual Acceptance Rate (tons): 228,520 Landfill Owner Type: Public Year Annual Acceptance Rate Reported: 1993 Alternative Landfill Name: Design Capacity (tons): City: Acres Currently Landfilled (acres): County: Jefferson Average Depth (feet): State: AL Waste-in-Place (tons): 4.657.815 Year Open: 4,844,128 1972 1998 Waste-in-Place (tons): Year Closed: 1997 **B. LANDFILL GAS COLLECTION** Estimated Methane Generation (mmscf/d): 1.66 LFG Collection System Status: Current LFG Collected (mmscf/d): Collection and Treatment System Required Under NSPS/EG: No C. LANDFILL GAS UTILIZATION Current Utilization: **Utilization System Status:** Potential Utilization System Type: Unknown Utilization System Start Year: Electric Utility Provider(s): Natural Gas Provider(s): Energy Purchaser(s): Jefferson County Jail Capacity: Electricity Generation Project (MW) OR Direct Use Project (mmBtu/hr) Estimated Potential Capacity: 5 52 Current Capacity: Planned Capacity: Alabama Power Company; Bessemer Elec Service; Southeastern Power Admin; Tarrant, City of, Elec Utilities in County: D. ENVIRONMENTAL BENEFITS OF UTILIZATION Potential Current Methane Reduction (tons/yr): 9,580 0 CO2 Equivalent of CH4 Reduction (tons/yr): 201.182 0 Emissions Avoided by Fossil Fuel Displacement: Electricity Generation Project Direct Use Project CO2 (tons/yr) SO2 (tons/yr) CO2 (tons/yr) SO2 (tons/yr) Coal: 41,042 259 28,849 263 Fuel Oil: 33,686 217 23,678 138 Natural Gas: 22,651 0 15,922 0 E. CONTACT INFORMATION Landfill Owner Landfill Operator Contact Name: Chris McNair, Chairman Mark Bryant, Solid Waste Administrator Mailing Address: Courthouse Annex 202-B Courthouse Room 217

\* Itallicized indicates values estimated by EPA. December 5, 1998 State: AL Page: 25

205-325-5139

205-325-5981



Phone Number:

Fax Number:

205-325-5504